

CLAIMS

1. A method for measurement event synchronisation of
a portable radio communication apparatus (100) providing
5 multiple radio access technologies, **characterised by** the
steps of:

identifying an idle gap between transceiver
activities of a first radio access technology device
(102) (401), and

10 sending an execute signal to a second radio access
technology device (101) for initiating inter radio access
technology measurements of said second radio access
technology device (101) to be performed during said gap
(402, 402a-c, 403).

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2. A method according to claim 1, **characterised in**
that said execute signal is sent at the beginning of said
gap.

20 3. A method according to claim 1, **characterised in**
that said execute signal is sent at a specified period
before said gap.

25 4. A method according to any of the claims 1-3,
characterised by, before the step of sending an execute
signal, the additional step of:

sending a prepare signal to said second radio access
technology device (101) for information about an upcoming
gap available for inter radio access technology
30 measurements of said second radio access technology device
(101) (402a).

5. A method according to claim 4, **characterised by**
the further step of:

· preparing said second radio access technology device (101) for performing said inter radio access technology measurements (402b).

5 6. A method according to claim 5, **characterised in** that said step of preparing said second radio access technology device (101) comprises the step of:

bring said second radio access technology device (101) out of a low-power consuming state

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7. A method according to claim 5 or 6, **characterised in** that said prepare signal includes information about the estimated length of said gap.

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8. A method according to claim 7, **characterised in** that said step of preparing said second radio access technology device (101) comprises the step of:

determining whether inter radio access technology measurements is possible during the next gap, based on
20 information about the estimated length of said gap.

9. A method according to any of the claims 1-3, **characterised in** that said execute signal includes information about the estimated length of said gap.

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10. A method according to any of the preceding claims, **characterised in** that the step of identifying an idle gap (401) is performed between transceiver activities of a GSM based first radio access technology device (102),
30 and said execute signal is sent to a WCDMA based second radio access technology device (101) for initiating inter radio access technology measurements of said WCDMA based second radio access technology device (101) to be performed during said gap.

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11. A method according to any of the preceding claims, **characterised** in that the step of identifying an idle gap (401) is performed between transceiver activities of a WCDMA based first radio access technology device (101), and said execute signal is sent to a GSM based second radio access technology device (102) for initiating inter radio access technology measurements of said GSM based second radio access technology device (101) to be performed during said gap.

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12. A portable radio communication apparatus (100) providing multiple radio access technologies, comprising a controller (113), a first radio access technology device (102) and a second radio access technology device (101), **characterised** in that said first and second radio access technology devices (101,102) are operatively interconnected, and that said controller (113) is adapted to:

identify an idle gap between transceiver activities of said first radio access technology device (102), and send an execute signal to said second radio access technology device (101) for initiating inter radio access technology measurements of said second radio access technology device (101) during said gap.

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13. A portable radio communication apparatus (100) according to claim 12, **characterised** in that said first and second radio access technology devices (101,102) have common radio resource means (106,107) for said inter radio access technology measurements.

14. A portable radio communication apparatus (100) according to claim 12 or 13, **characterised** in that said first radio access technology device (102) is a GSM based radio access technology device and said second radio access

technology device (101) is a WCDMA radio access technology device.

15. A portable radio communication apparatus (100)
5 according to any of the claims 12 or 14, characterised in
that said first radio access technology device is a WCDMA
based radio access technology device and said second radio
access technology device is a GSM radio access technology
device.

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